Claims

1. Pressure limiting valve, comprising a valve body (10) biased into a closed position, whereby a connection between a pressure port (P) and a return port (R) may be controlled open, and to which a damping device which includes a damping piston (38) defining a damping chamber (42) is associated for damping the valve body movement, characterized in that the damping chamber (42) is formed on the return side and connected with the pressure port (P).

2. The pressure limiting valve in accordance with claim 1, wherein the damping chamber (42) is formed coaxial with a spring chamber (50) accommodating a closing spring (12).

3. The pressure limiting valve in accordance with claim 2, wherein the damping piston (38) extends in portions thereof through an axial bore (30) of the valve body (10), that opens into the damping chamber (42) on the one hand and into a pressure port-side end face (34) of the valve body (10) on the other side.

4. The pressure limiting valve in accordance with claim 3, wherein the valve body (10) sealingly plunges into a damping sleeve (44) through which the damping piston (38) extends in portions thereof, and which forms an end-side termination of the damping chamber (42).

5. The pressure limiting valve in accordance with claim 4, wherein the valve body includes a radially

recessed, return-side axial protrusion (28) which plunges into the damping sleeve (44).

6. The pressure limiting valve in accordance with claim 4 or 5, wherein the damping piston(38) extends through a bottom (46) of the damping sleeve (44).

7. The pressure limiting valve in accordance with any one of claims 4 to 6, wherein the damping sleeve (44) and/or the damping piston (38) are supported on a set screw (14).

8. The pressure limiting valve in accordance with claim 2 and any one of claims 4 to 7, wherein the closing spring (12) encompasses the damping sleeve (44).

9. The pressure limiting valve in accordance with any one of claims 2 to 8, wherein the valve body (10) includes a pressure port-side, radially recessed pin (18), in the range of which the axial bore (36) is stepped back.

10. The pressure limiting valve in accordance with claim 9, wherein the pin (18) has at its outer circumference longitudinal grooves (2) whereby the pressure port (P) is hydraulically connected with the valve seat (8).